

*Table S1: Listing of tested formulations, including manufacturers recommendations for storage and handling of insulin formulations*

Insulin type	Conditioning	Storage temp. before opening [°C]	Recommended usage time once open	Maximal temp. during usage	Other storage recommendations
Novorapid 100 IE (Novo Nordisk)	Solution, 3ml prefilled pen	2°C - 8°C	4 weeks	30°C	Do not freeze. Keep the vial in the outer carton in order to protect from light
Insulatard HM 100 IE (Novo Nordisk) *	Suspension, 10 ml flask	2°C - 8°C	6 weeks	25°C	Do not freeze Keep the vial in the outer carton in order to protect from light
Lantus Solostar 100 UI/ml (Sanofi Aventis)	Solution, 3ml prefilled pen	2°C - 8°C	4 weeks	25°C	Do not freeze Protect from light Do not use after 4 weeks at RT (note the opening date on the vial)
Humalog KwikPen 100 IE (Eli Lilly)	Solution, 3ml prefilled pen	2°C - 8°C	4 weeks	15-25°C	Do not freeze Protect from light, avoid direct sunlight exposure; do not use after 4 weeks at RT
Humalog KwikPen mix 25 100 IE (Eli Lilly)	Suspension, 3ml prefilled pen	2°C - 8°C	4 weeks	15-25°C	Do not freeze Protect from light, avoid direct sunlight exposure; do not use after 4 weeks at RT
Actrapid 100 UI/ml (Novo Nordisk) *	Solution, 10ml flask	2°C - 8°C	6 weeks	25°C	Do not freeze Keep the vial in the outer carton in order to protect from light. During usage period, do not put in a fridge or freezer
Mixtard 30 (Novo Nordisk)	Suspension, 10ml flask	2°C - 8°C	6 weeks	25°C	Do not freeze Keep the vial in the outer carton in order to protect from light. During usage period, do not put in a fridge or freezer

\*Insulins considered as essential medicines by WHO